

Northumbria Research Link

Citation: Kabouru, Berthollet, Andersson, Gunnel, Adolfsson, Annsofie, Borneskog, Catrin and Namegabe, Edmond Ntabe (2014) Knowledge and Attitudes towards Sexual Violence in Conflict-Affected Rural Communities in the Walikale District, DR Congo: Implications for Rural Health Services. *Annals of Public Health and Research*, 1 (2). p. 1009. ISSN 2378-9328

Published by: JSciMed Central

URL: <https://www.jsimedcentral.com/PublicHealth/alliss...>
<<https://www.jsimedcentral.com/PublicHealth/allissues.php>>

This version was downloaded from Northumbria Research Link:
<http://nrl.northumbria.ac.uk/id/eprint/41467/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)

Research Article

Knowledge and Attitudes towards Sexual Violence in Conflict-Affected Rural Communities in the Walikale District, DR Congo: Implications for Rural Health Services

Berthollet Bwira Kaboru^{1*}, Gunnell Andersson¹, Catrin Borneskog¹, Annsofie Adolfsson¹ and Edmond Ntaye Namegabe²

¹School of Health and Medical Sciences, Örebro University, Sweden

²Faculté de Santé et Développement Communautaires, Université Libre des Pays des Grands Lacs (ULPGL), Goma, DRC

***Corresponding author**

Berthollet Bwira Kaboru School of Health and Medical Sciences, Örebro University, Fakultetsgatan 1, 701 82 Örebro, Sweden, Tel: 4619301184; Email: Berthollet.Kaboru@oru.se

Submitted: 24 November 2014

Accepted: 15 December 2014

Published: 17 December 2014

Copyright

© 2014 Kaboru et al.

OPEN ACCESS**Keywords**

- Sexual violence
- Community perspectives
- Rural health
- Post-conflict

Abstract

Sexual violence has become endemic in the Democratic Republic of Congo (DRC), but the perspectives of rural communities of the scourge remain poorly researched. This study aims to describe the attitudes and knowledge of rural communities in regard to sexual violence, its occurrence and associated problems in rural communities in the Itombere/Walikale district in the DRC. A descriptive cross-sectional design was adopted, and a structured questionnaire used. Four hundred respondents participated, representing a group of ten villages populated by a total of 10,000 inhabitants. The respondents stated that perpetrators were often men from their own village. The fields were cited as being the place where most of the assaults occurred. A substantial proportion of the respondents lacked sufficient knowledge of the health outcomes of sexual violence. HIV infection and unwanted pregnancies were the most feared consequences. The victims of violence either experienced compassion or suffered rejection, depending on the community groups. Victims were mostly supported by women from their community, followed by husbands, relatives and authorities. Health facilities were the primary sources of support for victims. Rural health facilities need to revolutionise their health education strategies to improve the current situation.

INTRODUCTION

War in the Democratic Republic of the Congo (DRC) has had unbearable consequences for the population: up to 8 million people have died since 1996 [1], and approximately 5 million people have been internally displaced, especially in the Eastern provinces of Kivu. Some authors have labelled this war “the forgotten holocaust” [2]. One of the most tragic consequences of this recurrent war has been the widespread sexual violence against women. In this context, forced sex has been used as a weapon. Violence has been described as strategically linked to the destruction of a population and entire communities [3]. In some settings, armed groups have raped all of the women in an entire village. A significant proportion of victims of sexual violence chose not to disclose their awful experiences of rape.

Health workers reported that “there is a lot of violence going on and victims do not report it because it is considered social death” [4,5].

The consequences of rape on the victims’ health are numerous. In DRC, clinical studies have demonstrated that at least 5% of assaulted women had fistulas [6]. A traumatic gynaecologic fistula is an injury that can result from violent sexual assault, and often occurs in conflict settings. Brutal rape (by one or more assailants or by the use of gun barrels, beer bottles, or sticks) can result in a tear, or fistula, between a woman’s vagina and her bladder or rectum, or both. Women with traumatic fistula are unable to control the flow of their urine and/or faeces, and they find it impossible to keep themselves clean [7]. Sexual violence increases women’s risk of becoming infected with sexually

transmitted infections (STIs) such as HIV, and limits their ability to adopt elementary preventive measures. It has been estimated that the military forces in the African Great Lakes region (where DRC is located) have one of the highest rates of STIs of any military group in the world. According to estimates, up to 60% of soldiers and other fighters in the region are infected with HIV [8]. Yet studies have shown that only 30% of women victims undergo post-exposure prophylactic (PEP) treatment of HIV [4]. The question as to how sexual violence affects women's sexual and reproductive practices remains poorly researched. Moreover, a recent survey (yet to be published) in which 104 healthcare staff from the neighbouring Goma region were interviewed found that 26% considered themselves as fully incompetent to take care of women who suffered from sexual violence [9]. This shows the importance of enhancing competence among healthcare providers. In this respect, it is critical to test methods and models of strengthening competence among care giving staff. It is of paramount importance that health professionals are properly equipped so that they are skilled enough to respond to abused women's multidimensional needs.

Despite the overwhelming devastating occurrence of sexual violence in this country, studies on communities' understanding of the phenomenon, collective strategies to cope with the scourge and communities' relationships with health services are still very scarce. The few available published studies focus mostly on clinical management and care issues, including management of fistulas and social psychological aspects [5,10]. Such clinical data is often incomplete and reveals only the tip of the iceberg. In fact, many victims are reluctant to report the sexual violence that they have suffered either to the police, the health services or their families because they fear revenge from the abuser (mainly when they know the perpetrator or when the perpetrator is an influential person with a position in the military or administrative authority etc.). Moreover, in most African societies, sexually assaulted people are often accused of complicity in acts perpetrated against them. Consequently, they keep silent to avoid social rejection, forced marriage with their abuser, incarceration, further abuse or even murder. The general attitude of the community is likely to affect the victims' approach to seeking care, as well as their relationship with the health services. This is why it is important to understand the perspective of community members to sexual violence phenomenon in general, including the factors that determine the community's approach and practices concerning the support given to victims of sexual violence and the role of community health services.

AIM

The aim of this study is to describe the perspectives of rural community members in relation to sexual violence, to the existing support of victims, and to general social and cultural approaches to preventing the occurrence of violence against women.

METHODS

Design, setting and study population

This study adopted a descriptive cross-sectional design, using a quantitative approach. The study setting is the Itebero area in the rural district of Walikale, in the North Kivu province. The Itebero area has a total population of 36,233 inhabitants.

Sampling procedure

The Itebero sector was chosen because of its advantageous position in comparison to many other more isolated locations in the Walikale district. Itebero is relatively easily accessible, thanks to the main road linking Walikale to Bukavu, although the road is in poor condition. The majority of the villages are connected to the main road, but some are difficult to access.

The population density is relatively high along the road, where many internally displaced people have sought refuge following attacks on their home villages.

The study targeted a constellation of 10 rural catchment areas comprising 10 villages. The villages were selected based on demographic density, accessibility and cultural specificity. The sampling procedure was stratified and stepwise; the village being taken as a stratum. Firstly, the villages were determined, according to the afore-mentioned criteria. The population of the 10 selected villages was estimated at 10,250 persons, belonging to approximately 1,707 households. Secondly, households were identified in a systematic way by the research assistants (interviewers). Once they arrived in a village, they determined the centre of the village by asking the inhabitants and by visually observing the village layout. Beginning at the house identified collectively as best representing the village centre, the research assistants then selected each fourth house from there, starting from their right-hand side. There were no village maps available, nor precise population data allowing a more precise identification of the village centre.

The size of the sample was determined based on the following assumptions: 95% confidence interval ($z=1.96$) and error margin of 5%, and a 50% estimated prevalence of sexual violence in North Kivu – based on a study that found up to 40% prevalence of sexual violence [11]. A sample size calculation gave the required sample of $n=313$ households (out of the total of 1,707 households).

In order to account for inconsistencies in the population size, as the population was likely to become frequently displaced, it was decided to target a sample of 400 households.

Data collection and analysis

The data was collected using a structured questionnaire with closed-ended questions. The questionnaire developed by the investigators, originally in French, was translated into Kiswahili, the most widely spoken language in the study area.

The questionnaire was administered by a multidisciplinary team of research assistants under the coordination of a principal investigator. These interviewers were locally recruited. They had to have completed at least high school education and be capable to communicate fluently in Kiswahili and French. They were identified using a snowballing technique. The first candidate identified helped to recruit the next, and so on. After recruitment, they were trained for two days prior to the exercise so as to become well acquainted with the questionnaire. Each questionnaire had more than 60 questions.

The responses were coded and the data was entered by the research team using SPSS 20. The analysis consisted of univariate analysis, followed by bivariate analysis whenever necessary.

A chi-square test was used to assess differences for categorical variables. The significance level considered for analysis was 0.05.

Ethical considerations

The study obtained ethical clearance from the Provincial Health Inspectorate in the North-Kivu Province, and from the Walikale Health District's Office. The purpose and importance of the study was explained to respondents before the interview was initiated. The principle of voluntary participation in the survey was implemented, and the respondent was free to respond to our questionnaire or not. Whoever refused for personal reasons was thanked by the researchers. Confidentiality was guaranteed to all respondents in that no name or address was requested. They were guaranteed that the data would be analysed and summarised anonymously. Due to the complexity of the subject, responses exclusively from adults would not be sufficient to provide a complete picture of the situation, because sexual violence in the region also affects younger age groups. In addition, there are several households that are headed by young people, sometimes even minors. Thus, within each household the parents were primarily targeted as respondents, and in their absence any girl or boy aged 14 years and older was included in their place.

RESULTS

Respondents socio-demographics characteristics

The majority of respondents were relatively young with 81% of them aged within the range of 14-44 years and those older than 45 years representing only 19%. Young people whose age ranged between 14 and 19 years represented 23.8% of the sample. Approximately half of the respondents were women (50.2%) and half were men (49.8%); 66% were parents, whereas 29.5% were children (14 years and more), and other family members represented 4.5%.

Awareness of occurrence of sexual violence, of victims, and of types of perpetrators

The large majority of the respondents (96%) reported having heard of cases of sexual violence occurring in their community, compared to 3.5% who had not heard of such cases. As far as knowing of individual cases of sexual violence, 70% of the respondents stated they knew of these, 13% did not know whereas 15% had no responses in this respect.

As to the respondents' perception of the various forms of sexual violence occurring in the community the following responses were mentioned (Figure 1).

The respondents were asked about their perceptions of the most likely place where sexual violence takes place. The responses are presented in the (Figure 2).

As far as perpetrators of sexual violence are concerned, the findings indicated that the majority are thought to be men from the same village (45.5%), whereas 26.3% of the respondents accused everybody as being responsible. Other small proportions named the local population (11.7%), displaced persons (6.8%), village authorities (3.2%) and others (6.5%).

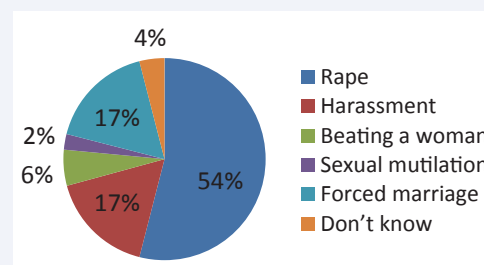


Figure 1 Most frequent forms of sexual violence.

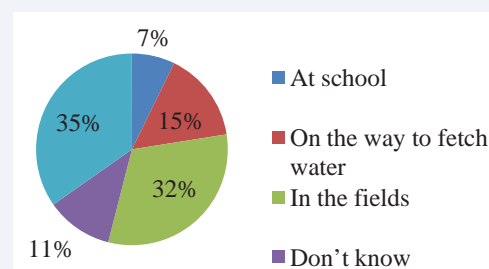


Figure 2 Places of perpetration of sexual assault.

Perceived reasons for committing sexual violence

The study explored the reasons why the various perpetrators committed sexual abuse. The results of this analysis are summarised in the table below.

Massive human rights violation was the most frequently given response (26.3%); the desire for control by perpetrators. Revenge stemming from previous conflicts was also mentioned by a substantial number of respondents, whereas purely political and ideological reasons were of no importance to many (3% only of the responses).

Knowledge of consequences sexual violence

More than two-thirds of the respondents (71.2%) stated that they knew of the health related and social consequences of sexual violence to the victims, whereas 28.8% did not know of any consequences. An assessment for a difference between women and men in this respect showed no significant statistical difference ($p=0.693$). As to specific health-related consequences, the responses provided are summarised in table 2 below. HIV infection was the primary consequence feared by approximately half of the respondents, followed by unwanted pregnancies. Up to 15% of the respondents stated not knowing of any health-related consequences of sexual violence (Table 2).

Only 16% of the respondents were aware of women who had suffered sexual violence and who consequently tested positive for HIV. As far as the psychosocial consequences of sexual violence are concerned, most respondents cited discrimination and stigmatisation from husbands and close relatives (32.3%), followed by rejection by husbands (24.2%) and isolation from the village (6.5%). Surprisingly, many respondents were not aware of any social consequence (37%).

Health seeking behaviour by victims of sexual violence

The respondents were asked to state the most ideal place for support to victims of sexual violence. The role of the health sector was clearly recognised, as reported by more than two-thirds of respondents (77.5%), the remainder citing the police and others options as summarised in (Table 3).

Different community groups' attitudes towards sexually abused women

The study attempted to assess the respondents' perceptions of what various community groups' attitudes are regarding abused women, including the perceptions of other women, of husbands and the overall community. Women in the community were found to be most empathetic towards assaulted women out of all the groups in the community. As to opinions of stigmatisation and rejection of victims, there was no statistical difference between women in the community and husbands, whereas, family members and authorities were described as being less stigmatising than other women in the communities.

Table 1: Reasons behind perpetrators' acts of sexual violence.

| Reasons behind perpetrators' acts of sexual violence | Frequencies | Percentages |
|--|-------------|-------------|
| Massively abusive sexual behaviour | 105 | 26.3% |
| Search for 'magic' power | 38 | 9.5% |
| Desire for domination over the community | 90 | 22.5% |
| Revenge due to a previous conflict | 41 | 10.2% |
| Political and ideological motivations | 12 | 3.0% |
| Other | 114 | 28.5% |
| Total | 400 | 100.0% |

Table 2: Consequences of sexual violence.

| Health consequences of violence | Frequencies | Percentages |
|---------------------------------|-------------|-------------|
| HIV and AIDS | 194 | 48.5% |
| Genital mutilation and fistulas | 17 | 4.25% |
| Unwanted pregnancy | 108 | 27.0% |
| Others | 20 | 5.0% |
| None | 61 | 15.25% |
| Total | 400 | 100% |

Table 3: Health seeking behaviours by victims of sexual violence.

| Health seeking behavioural options | Frequencies | Percentages |
|------------------------------------|-------------|-------------|
| At the health centre | 310 | 77.5% |
| Auto-medication | 21 | 5.3% |
| Seeing traditional healer | 13 | 3.2% |
| Reporting to the police | 42 | 10.5% |
| Hiding | 2 | 5% |
| Do not know | 7 | 1.8% |
| Others | 5 | 1.2% |
| Total | 400 | 100% |

As compared to husbands, family members and authorities were more likely to take assaulted women to the hospital.

Assaulted women's real needs – as perceived by community members

The respondents were asked to identify the most prevalent support/treatment that the victims of sexual violence would require. Evidently, hospital medical care was predominantly mentioned (70.2%), followed by the need for justice, human rights and dignity (16.3%), as well as support to deal with psychological trauma (8.5%). Remarkably, the need for socioeconomic rehabilitation was mentioned by a small number of respondents (3.3%).

DISCUSSION

This study has given some interesting insights into rural community members' perspectives of sexual violence. Most studies on sexual violence from this region have been conducted in urban areas and have largely focused on clinical aspects [6,12-14].

The study shows that in the surveyed rural community, virtually everyone was aware of cases of sexual violence that occurred in their community and they knew of individual victims of this affliction. As to the reported perpetrators, slightly less than half of the respondents (45%) stated that the perpetrators are thought to be men from the same village. This finding reveals an alarming attitude, that of the generalisation of sexual violence. Indeed, whereas earlier studies accused the members of armed groups as being the major perpetrators, more recent studies indicate a trend towards a normalisation or "communalisation" of the sexual violence phenomena. In other words, even if most perpetrators are still profiled as combatants [5,15], there are indications of increasing proportions of civilians accused of committing sexual violence [16] or of frequent violence within families, a pattern that calls for new approaches to the prevention of sexual violence [17]. In addition, there is evidence that children and adolescents are more likely to be assaulted by people known to the family [14,18].

A register study from a hospital showed that patient victims reported that most of the attacks occurred in individual homes (56.5%), with the fields (18.4%), and the forest (14.3%) also being frequent locations of attack [13]. This study found that one out of three incidents of assault reportedly occurred in the fields, which could be expected to be in rural settings.

The majority of rural dwellers reported knowing the consequences of sexual violence. With regard to health consequences, HIV infection and unwanted pregnancy were the most commonly cited health outcomes. This is consistent with previous studies, including those conducted in urban settings that showed that rape survivors are invariably considered HIV contaminated, a perception enhanced by limited access to prophylactic care [10,12,13]. However, more than one-quarter of the respondents (28.8%) did not know of any consequence, which is alarming. In addition, no statistical difference could be found with respect to the respondents' social backgrounds such as gender, marital status or age, suggesting that this knowledge deficiency is characteristically shared among all

Table 4: Various community groups' attitudes towards abused women.

| Community groups | Respondents' opinions about community groups' attitudes towards victims of sexual violence | | | | | | |
|-------------------|--|--------------|------------------|----------------------------|------------------|----------------------|------------------|
| | | Empathy | | Stigmatisation & Rejection | | Referral to hospital | |
| | | Freq. (in %) | OR (95% CI) | Freq. (in %) | OR (95% CI) | Freq. (in %) | OR (95% CI) |
| Women | Yes | 47.8 | 1 | 16.8 | 1 | 0.3 | - |
| | No | 52.2 | | 83.2 | | 99.7 | |
| Husbands | Yes | 17.3 | 0.23 (0.15-0.35) | 15.6 | 0.92 (0.49-1.70) | 45.3 | 1 |
| | No | 82.7 | | 84.4 | | 54.7 | |
| Family members | Yes | 30.3 | 0.47 (0.36-0.63) | 7.6 | 0.41 (0.18-0.91) | 50.5 | 1.23 (1.10-1.38) |
| | No | 69.7 | | 92.4 | | 49.5 | |
| Overall community | Yes | 23.8 | 0.34 (0.24-0.48) | 20.1 | 1.25 (0.70-2.20) | 30.0 | 0.52 (0.38-0.70) |
| | No | 76.2 | | 79.9 | | 70.0 | |
| Authorities | Yes | 25 | 0.36 (0.26-0.51) | 6.4 | 0.34 (0.14-0.80) | 59.2 | 1.75 (1.33-2.33) |
| | No | 75 | | 93.6 | | 40.8 | |

categories of respondents. The same applied to knowledge of specifically health related outcomes, where more than 15% of the respondents reported not knowing of any consequence. Poor community health education in isolated rural communities could be one of the major explanatory factors for this low awareness level. Surprisingly, a sizeable proportion of respondents did not mention genital mutilation and fistulas, yet this health problem has been specifically highlighted in major publications and the media, as the foremost health consequence of sexual violence in the region [6,10].

According to the respondents, health facilities remain the preferred locale where victims of sexual violence seek assistance. This is interesting in that other options such as hiding, auto-medication, or use of traditional medicine are not relevant. This raises the question of whether rural health facilities are accessible, suitably equipped, and manned with the necessary staff, both in terms of numbers and specialist training. Previous studies have found that less than half of victims of violence reported having accessed a hospital, clinic or pharmacy, and less than one-quarter of health facilities staff had been formally trained to care for victims of sexual violence [19].

The respondents' perceptions of community groups' attitudes towards assaulted women were informative. The most compassionate individuals were other women in the community, an indication that local women organisations may be critical in promoting increased empathy among community members regarding the victims of sexual violence. Surprisingly, husbands were less likely to take their assaulted wives to health facilities, as compared to other family members and the authorities. This indicates husbands' feelings of shame and anger for what their wives experienced [20]. This finding is important even from the victims' perspective, for whom it has been shown that receiving support from their husbands after an incident of rape, was an act of protection against survivors' feelings of shame and social isolation [12]. These findings are indicative of the importance of a family-centred approach in designing effective strategies to mitigate the consequences of sexual violence to the victims. The literature is scarce as to the effectiveness of strategies in preventing and mitigating sexual violence at community level

[21], and this could prove to be even more complex in troubled settings such as in rural Congo [22].

It is clearly apparent that health facilities, together with the authorities, are expected to play a critical role, both in responding to the immediate care needs of the victims and in advancing more community sensitive health education strategies.

However, this study may be subject to some limitations, as the sampling process was not random, the findings cannot be transferred to other communities. The process of identification of the centre of the villages was not consistent, due to a lack of maps of the villages and of precise and up to date population information data. Future studies with more strict sampling methods are called for in order to inform health services and community work to support victims of sexual violence. In addition, the study has not targeted victims of sexual violence themselves. Their opinions remain critical and should be researched to inform any clinical or social intervention in their favour.

CONCLUSION

Surveyed rural communities are in need of an increased level of information and education to understand the various consequences of sexual violence, particularly with regard to the prevailing trends of generalisation of sexual violence in the community. Husbands, family members and authorities are presented as critical actors in shaping communities' attitudes to assaulted women. Beyond the requirements concerning proper clinical management issues, health facilities need to build on this social reality by adopting more family-centred approaches in their community education efforts and support programs for victims.

REFERENCES

1. Coghlan B, Brennan RJ, Ngoy P, Dofara D, Otto B, Clements M, et al. Mortality in the Democratic Republic of Congo: a nationwide survey. *Lancet*. 2006; 367: 44-51.
2. Nyago, K., Congo-Kinshasa: the forgotten holocaust, in *The Monitor* 2003: Kampala.
3. Solhjell R, Sexual violence in war - Civilians as battleground. *Development Dialogue*. 2009; 53: 123-135.

4. Wakabi W. Sexual violence increasing in Democratic Republic of Congo. *Lancet*. 2008; 371: 15-16.
5. Steiner B, Benner MT, Sondorp E, Schmitz KP, Mesmer U, Rosenberger S. Sexual violence in the protracted conflict of DRC programming for rape survivors in South Kivu. *Confl Health*. 2009; 3: 3.
6. Onsrud M, Sjøveian S, Luhiriri R, Mukwege D. Sexual violence-related fistulas in the Democratic Republic of Congo. *Int J Gynaecol Obstet*. 2008; 103: 265-269.
7. USAID, Traumatic Gynecologic Fistula: A Consequence of Sexual Violence in Conflict Settings. 2006.
8. Omba Kalonda JC. [Sexual violence in the Democratic Republic of Congo: impact on public health?]. *Med Trop (Mars)*. 2008; 68: 576-578.
9. Kaboru B.B, Adolfsson Annsofie, Andersson Gunnel, Namegabe, Edmond Ntabe. "Qualified but not competent enough": health workers' assessment of their competence in relation to caring for sexually abused women in Eastern Democratic Republic of Congo. *Applied Nursing Research*. 2014.
10. Longombe AO, Claude KM, Ruminjo J. Fistula and traumatic genital injury from sexual violence in a conflict setting in Eastern Congo: case studies. *Reprod Health Matters*. 2008; 16: 132-141.
11. Johnson K, Scott J, Rughita B, Kisielewski M, Asher J, Ong R, et al. Association of sexual violence and human rights violations with physical and mental health in territories of the Eastern Democratic Republic of the Congo. *JAMA*. 2010; 304: 553-562.
12. Kelly JT, Betancourt TS, Mukwege D, Lipton R, Vanrooyen MJ. Experiences of female survivors of sexual violence in eastern Democratic Republic of the Congo: a mixed-methods study. *Confl Health*. 2011; 5: 25.
13. Bartels SA, Scott JA, Mukwege D, Lipton RI, Vanrooyen MJ, Leaning J. Patterns of sexual violence in Eastern Democratic Republic of Congo: reports from survivors presenting to Panzi Hospital in 2006. *Confl Health*. 2010; 4: 9.
14. Malemo Kalisya L, Lussy Justin P, Kimona C, Nyavandu K, Mukekulu Eugenie K, Jonathan KM, et al. Sexual violence toward children and youth in war-torn eastern Democratic Republic of Congo. *PLoS One*. 2011; 6: e15911.
15. Bartels S, Kelly J, Scott J, Leaning J, Mukwege D, Joyce N, et al. Militarized sexual violence in South Kivu, Democratic Republic of Congo. *J Interpers Violence*. 2013; 28: 340-358.
16. Bartels SA, Scott JA, Leaning J, Kelly JT, Mukwege D, Joyce NR, et al. Sexual violence trends between 2004 and 2008 in South Kivu, Democratic Republic of Congo. *Prehosp Disaster Med*. 2011; 26: 408-413.
17. Peterman A, Palermo T, Bredenkamp C. Estimates and determinants of sexual violence against women in the Democratic Republic of Congo. *Am J Public Health*. 2011; 101: 1060-1067.
18. Nelson BD, Collins L, VanRooyen MJ, Joyce N, Mukwege D, Bartels S. Impact of sexual violence on children in the Eastern Democratic Republic of Congo. *Med Confl Surviv*. 2011; 27: 211-225.
19. Scott J, Polak S, Kisielewski M, McGraw-Gross M, Johnson K, Hendrickson M et al. A mixed-methods assessment of sexual and gender-based violence in eastern Democratic Republic of Congo to inform national and international strategy implementation. *Int J Health Plann Manage*. 2013; 128: 188-216.
20. Kelly J, Kabanga J, Cragin W, Alcayna-Stevens L, Haider S, Vanrooyen MJ. 'If your husband doesn't humiliate you, other people won't': gendered attitudes towards sexual violence in eastern Democratic Republic of Congo. *Glob Public Health*. 2012; 7: 285-298.
21. DeGue S, Holt MK, Massetti GM, Matjasko JL, Tharp AT, Valle LA. Looking ahead toward community-level strategies to prevent sexual violence. *J Womens Health (Larchmt)*. 2012; 21: 1-3.
22. Kohli A, Tosha M, Ramazani P, Safari O, Bachunguye R, Zahiga I, et al. Family and community rejection and a Congolese led mediation intervention to reintegrate rejected survivors of sexual violence in Eastern Democratic Republic of Congo. *Health Care Women Int*. 2013; 34: 736-756.

Cite this article

Kaboru BB, Andersson G, Borneskog C, Adolfsson A, Namegabe EN (2014) Knowledge and Attitudes towards Sexual Violence in Conflict-Affected Rural Communities in the Walikale District, DR Congo: Implications for Rural Health Services. *Ann Public Health Res* 1(2): 1009.